

REMARKS

Claims 1-42 remain in the application for consideration. In view of the following remarks, Applicant respectfully requests the rejections be withdrawn and the application forwarded on to issuance.

Statutory Double Patenting

Claims 1-17 and 32-38 stand rejected under 35 U.S.C. §101 statutory double patenting as claiming the “same invention” as various claims in U.S. Patent No. 6,760,028 (the ‘028 Patent). For example, claim 1 in the present application is rejected over claim 1 in the ‘028 Patent. For the reasons set forth below, Applicant respectfully traverses the Office’s rejections.

MPEP § 804 instructs, with regard to “same invention” double patenting, that “the question to be asked is: Is the same invention being claimed twice?... ‘Same invention’ means identical subject matter. Further on in §804, the MPEP provides an example of what constitutes *identical subject matter*. Specifically, “a claim reciting a widget having a length of ‘36 inches’ defines the same invention as a claim reciting the same widget having a length of ‘3 feet’”. Thus, the “same invention” must be identical.

Using the instructions provided by the MPEP, consider now the specific subject matter of claim 1 in the present application and claim 1 from the ‘028 Patent, both of which are provided below. The differences between these two claims are highlighted in bold italics. From even a cursory inspection it is evident that the “same invention” is not being claimed.

Claim 1 from the Present Application

1 1. A method of providing a hinted font comprising:
2 selecting a first TrueType font that has been hinted with hints that
3 define constraints between control points associated with individual
4 characters of the font;
5 identifying individual characters of a second TrueType font that
6 correspond to individual characters of the first TrueType font, the second
7 TrueType font being different from the first TrueType font, individual
8 characters of the second TrueType font being unhinted; and
9 transferring hints from characters of the first TrueType font to
10 individual corresponding characters of the second TrueType font.

Claim 1 from the '028 Patent

1 1. A method of providing a hinted font comprising:
2 selecting a first TrueType font that has been hinted with hints that
3 define constraints between control points associated with individual
4 characters of the font;
5 identifying individual characters of a second TrueType font that
6 correspond to individual characters of the first TrueType font, the second
7 TrueType font being different from the first TrueType font, individual
8 characters of the second TrueType font being unhinted;
9 transferring hints from characters of the first TrueType font to
10 individual corresponding characters of the second TrueType font;
11 *discarding a hint where it appears inappropriate for a character of*
12 *the second TrueType font; and*
13 *maintaining indicia of a discarded hint to indicate where a hint*
14 *has been discarded.*

15
16 Likewise, consider a comparison of claim 32 in the present application and
17 claim 23 from the '028 Patent over which it is rejected. As in the above example,
18 the differences between the claims are indicated in bold italics.
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Claim 32 from the Present Application

22 32. A method of providing a hinted font comprising:
23 defining hints for a glyph of a first font, the hints being defined by
24 one or more statements that contain multiple values that define constraints
25

for the glyph, at least one of the values referencing a table entry that corresponds to a table value that is used to constrain the glyph;

establishing an association between the glyph of the first font and a glyph of a second font, the second font being different from the first font; and

translating the one or more statements so that the one or more statements now pertain to and define constraints for the glyph of the second font.

Claim 23 from the '028 Patent

23. A method of providing a hinted font comprising:

defining hints for a glyph of a first font, the hints being defined by one or more statements that contain multiple values that define constraints for the glyph, at least one of the values referencing a table entry that corresponds to a table value that is used to constrain the glyph;

establishing an association between the glyph of the first font and a glyph of a second font, the second font being different from the first font; and

translating the one or more statements so that the one or more statements now pertain to and define constraints for the glyph of the second font;

wherein some of the values pertain to specific points on the glyph of the first font, and:

said establishing comprises establishing an association between the specific points on the glyph of the first font and specific points on the glyph of the second font; and

said translating comprises changing at least some of the values of the individual statements to correspond to the specific points on the glyph of the second font, wherein said changing of at least some values comprises changing a table value, wherein said changing of the table value comprises:

determining a plurality of natural distances in the glyph of the second font, the natural distances being defined relative to specific points in the glyph of the second font that are to be constrained by the table value; and

calculating a new table value for the table entry as a function of the natural distances, wherein said calculating of the new table value comprises calculating a median of the natural distances.

1 From even a cursory inspection it is evident that the "same invention" is not
2 being claimed. Likewise, a comparison of the other claims as between the present
3 application and the '028 Patent lead to a similar conclusion.

4 Because the "same invention" is not being claimed as between the present
5 application and the '028 Patent, the Office's same invention double patenting
6 rejection is traversed.

7

8 **Obviousness-type Double Patenting**

9 Claims 18-26 stand rejected under obviousness type double patenting over
10 claims 17-22 of the '028 Patent. Applicant respectfully requests that this rejection
11 be held in abeyance until the indication of allowable subject matter.

12

13 **The Claim Rejections**

14 Claims 32, 34-36 and 38 stand rejected under 35 U.S.C. § 103(a) as being
15 obvious over U.S. Patent No. 5,982,387 to Hellmann.

16 Claim 37 stands rejected under 35 U.S.C. § 103(a) as being obvious over
17 Hellmann in view of U.S. Patent No. 5,155,805 to Kaasila.

18 Claims 1-31, 33 and 39-42 stand rejected under 35 U.S.C. § 103(a) as being
19 obvious over Hellmann in view of U.S. Patent No. 5,577,183 to Weyand.

20 Before specifically discussing the Office's rejections, the following
21 discussion is provided to assist the Office in appreciating the patentable
22 distinctions between Applicant's claimed embodiments and the reference to
23 Hellmann.

1 The Hellmann Reference

2 In making out the rejections of the claims, the Office relies principally and
3 primarily on the Hellmann reference.

4 Before specifically considering Hellmann, Applicant believes that there are
5 fundamental differences between subject matter disclosed in Applicant's
6 disclosure and the subject matter disclosed in Hellmann. Specifically, in various
7 embodiments described in Applicant's disclosure, characters of a first (hinted) font
8 are utilized to transfer hints to the *same* character of a second (unhinted) font. In
9 various embodiments, hint transfer takes place between *corresponding* characters
10 of *different* fonts.

11 Hellmann, on the other hand, discloses a method that compares strokes of a
12 character with *different strokes of the same character*. In other words, character
13 strokes are modified in Hellmann based on other strokes of the *same character*.
14 This is fundamentally different from the embodiments that are described and
15 claimed in the present application. There is no teaching or motivation in
16 Hellmann to modify a stroke of a character based on the same stroke of that
17 character, nor is there any teaching, suggestion or motivation to modify a first
18 character based on the same stroke of a second representation of the same
19 character. Thus, Hellmann is fundamentally different from the various
20 embodiments described in Applicant's specification. To this extent, Applicant
21 believes the Office's arguments with respect to Hellmann simply and inaccurately
22 distort Hellmann.

23 Exploring Hellmann in more detail, Hellmann discloses a method and
24 system for assigning hints and constructing a font file. The gist of Hellmann's
25 disclosure is perhaps best appreciated from the discussion of its Fig. 1.

1 Specifically, and with reference to Hellmann's Fig. 1, an outline-font creation
2 apparatus architecture is shown and described. The apparatus is employed for
3 cutting an outline of a character into elements that are referred to as "strokes".
4 Examples of strokes are shown at ST_i (i=1, 2 . . .). Hint data is then assigned to
5 the strokes, and a character is expressed as a collection of strokes.

6 Hellmann instructs that the apparatus includes a stroke memory 1 for
7 storing the strokes ST_i, a stroke classifying unit 2 for dividing strokes ST_i having
8 similar outlines into classes C_i, a classified-stroke memory 3 for storing the
9 classified strokes according to class, a hint-assignment learning unit 4 for
10 assigning a hint, by operator operation, to a predetermined position of the outline
11 of a representative element (master stroke) of each class C_i, a master-stroke hint
12 information memory 5 for storing hint information which prevails when a hint is
13 assigned by operator operation, and an automatic hint assignment unit 6 for
14 assigning hint information automatically to elements of the class, to which the
15 master element belongs, using learned hint information of the master stroke.

16 As Hellmann instructs, the stroke classifying unit 2 divides strokes having
17 similar outlines into classes, and the hint-assignment learning unit 4 assigns a hint,
18 by operator operation, to a predetermined position of the outline of the
19 representative element (master stroke) of each class and stores the hint information
20 in the memory 5, thereby learning hint assignment. The automatic hint assignment
21 unit 6 assigns hint information automatically to elements of the class to which the
22 master element belongs, using learned hint information of the master stroke.

23 As Hellmann instructs, character elements whose shapes are similar and to
24 which identical hint information is assigned are divided into classes automatically,
25 a hint is assigned solely to the master element of each class by operator operation

1 and the system is made to learn the assignment of the hint. The system
2 subsequently assigns hints to the other elements automatically.

3 It appears from a thorough reading of Hellmann, that Hellmann is directed
4 to methods and systems that work only upon characters of the same font. For
5 example, as Hellmann describes the font producing tool in more detail, Hellmann
6 states that the font producing tool (Fig. 3) "divides *an existing font* into strokes,
7 divides the strokes into parts, assigns hints to the outline shapes of the parts...."
8 See, e.g. column 9, lines 34-60. This teaching and disclosure simply cannot be
9 ignored.

10 Thus, it appears that the hints that are assigned in Hellmann are assigned
11 only to strokes within the same font. See, e.g. column 11, lines 38-45.

12 A great deal of the processing that Hellmann describes pertains to defining
13 the strokes within the same font, and then classifying the strokes into classes. For
14 example, in column 10 starting at line 57 and continuing through column 13,
15 Hellmann describes the process by which individual characters within a font are
16 cut into strokes and classified according to similarities in their outlines. Fig. 6A
17 shows a particular character having illustrated strokes, and Fig. 6B shows
18 individual stroke classes. Notice that within each stroke class the shapes are
19 similar if not the same. Hellmann instructs that hints are then assigned to
20 predetermined positions of the outline of a master stroke in each class. See, e.g.
21 column 11, lines 6-20. It is from these initially defined hints that Hellmann's
22 system automatically assigns hints to other strokes within a particular master
23 stroke's class, *within the same font*.

1 The Claims

2 Claim 1 recites a method of providing a hinted font comprising:

3

4 • selecting a first TrueType font that has been hinted with hints that
5 define constraints between control points associated with individual
6 characters of the font;

7 • identifying individual characters of a second TrueType font that
8 correspond to individual characters of the first TrueType font, *the second TrueType font being different from the first TrueType font*,
9 individual characters of the second TrueType font being unhinted;
10 and

11 • transferring hints from characters of the first TrueType font to
12 individual corresponding characters of the second TrueType font.

13 In making out the rejection of this claim, the Office argues that Hellmann
14 discloses selecting a first font as recited above and cites to column 11, lines 7-25
15 and Fig. 7 in support therefor. The Office then argues that Hellmann discloses
16 identifying individual characters of a second font as recited above, citing to
17 column 5, lines 55-59 in support therefor. The Office argues that Hellmann's
18 master element constitutes a first font and other similar shape elements constitute a
19 second font.

20 Applicant respectfully, but strongly, disagrees with the Office's
21 interpretation and application of Hellmann. Specifically, Hellmann teaches that
22 individual characters are "cut" into elements referred to as "strokes". This is
23 perhaps best appreciated from Hellmann's Figs. 6A and 6B. The individual
24 strokes described by Hellmann in this example come from the *same* character, not
25 from different fonts. These individual strokes are classified into classes (see Fig.
26 6B, for example) and then processed according to Hellmann's description.

1 Nowhere can Applicant find any discussion whatsoever of a process in
2 Hellmann that selects a first font, identifies individual characters of a second
3 *different* font that correspond to characters of the first font, and transfers hints
4 from characters of the first font to individual corresponding characters of the
5 second font. Applicant respectfully submits that the Office is not free to ascribe
6 properties to Hellmann that it simply does not have.

7 In point of fact, Hellmann appears to teach directly away from any such
8 concept by specifically describing a process which appears to transfer hints within
9 portions of characters *within the same font*. Additionally, to the extent that this
10 claim recites features that are neither disclosed nor suggested by Hellmann, the
11 rejection over the combination with Weyand adds nothing of significance.
12 Accordingly, for at least this reason, this claim is allowable.

13 **Claims 2-17** depend from claim 1 and are allowable as depending from an
14 allowable base claim. These claims are also allowable for their own recited
15 features which, in combination with those recited in claim 1, are neither disclosed
16 nor suggested in the references of record, either singly or in combination with one
17 another.

18 **Claim 18** recites a method of providing a hinted TrueType font comprising:

- 19 • providing a source character from a fully hinted TrueType font from
20 which hints are to be transferred, the source character having
multiple control points that are constrained by the hints;
- 21 • providing a target character from a *different* TrueType font to which
hints from the source character are to be transferred, the target
character having control points that will be constrained by the
transferred hints; and
- 22 • transferring hints associated with the source character and that refer
to control points on the source character to hints associated with the
target character and that refer to control points on the target
character.

1
2 This claim recites that the act of providing a target character provides a
3 target character from a TrueType font that is *different* from the TrueType font of
4 the source character. In making out the rejection of this claim, the Office
5 essentially makes that same argument that it did with respect to claim 1.
6 Applicant respectfully notes that Hellmann does not appear to disclose or suggest
7 transferring hints between *different* fonts. Rather, as noted above, Hellmann
8 appears to teach directly away from any such notion by specifically teaching a
9 process that appears to transfer hints between portions of characters from the same
10 font. Additionally, to the extent that this claim recites features that are neither
11 disclosed nor suggested by Hellmann, the rejection over the combination with
12 Weyand adds nothing of significance. Accordingly, for at least this reason, this
13 claim is allowable.

14 **Claims 19-31** depend from claim 18 and are allowable as depending from
15 an allowable base claim. These claims are also allowable for their own recited
16 features which, in combination with those recited in claim 18, are neither disclosed
17 nor suggested in the references of record, either singly or in combination with one
18 another.

19 **Claim 32** recites a method of providing a hinted font comprising:

20

- 21 • defining hints for a glyph of a *first font*, the hints being defined by
22 one or more statements that contain multiple values that define
23 constraints for the glyph, at least one of the values referencing a
24 table entry that corresponds to a table value that is used to constrain
25 the glyph;
- 24 • establishing an association between the glyph of the first font and a
25 glyph of a *second font*, the *second font* being *different from the first font*;

1 • translating the one or more statements so that the one or more
2 statements now pertain to and define constraints for the glyph of the
3 second font.

4 In making out the rejection of this claim, the Office argues that Hellmann
5 discloses defining hints for a glyph of a first font as recited above and cites to
6 column 11, lines 7-25 in support therefor. In addition, the Office argues that
7 Hellmann discloses establishing an association as recited above and cites to
8 column 5, lines 55-59 in support therefor. In making out this rejection, the Office
9 argues that Hellmann discloses within a class, a master element which has been
10 hinted and argues that this constitutes a first font. The Office further argues that
11 the other similar shapes within the class that Hellmann discloses constitute a
12 second font. As noted above, Applicant respectfully but strongly disagrees with
13 the Office's interpretation of this reference. Specifically, in the example that
14 Hellmann describes, the master element and similar-shaped elements come from
15 the same character within the *same font*. This being the case, it is virtually
16 impossible for Hellmann to disclose or suggest the recited act of "translating" that
17 appears in this claim. **How is it possible that elements that come from the same**
18 **character can constitute different fonts?** This interpretation is entirely
19 inconsistent with the specific thrust of Hellman's disclosure. Applicant submits
20 that the Office's interpretation is inaccurate and misplaced at best.

21 Hellmann appears to teach directly away from the subject matter of this
22 claim. Applicant respectfully notes that the Office is not free to ascribe properties
23 to Hellmann that it simply does not have. Accordingly, for at least this reason, this
24 claim is allowable.

1 **Claims 33-38** depend from claim 32 and are allowable as depending from
2 an allowable base claim. These claims are also allowable for their own recited
3 features which, in combination with those recited in claim 32, are neither disclosed
4 nor suggested in the references of record, either singly or in combination with one
5 another. In addition, given the allowability of claim 32, the rejections of claim 33
6 over the combination with Weyand, and of claim 37 over the combination with
7 Kaasila, are not seen to add anything of significance.

8 **Claim 39** recites an automated hinting system comprising:

9

- 10 • a computer-readable medium;
- 11 • one or more processors;
- 12 • computer-readable instructions resident in the computer-readable
medium which, when executed by the one or more processors, cause
the automated hinting system to:
 - 13 ○ select a first TrueType font that has been hinted with hints
that define constraints between control points on individual
characters of the font;
 - 14 ○ identify individual characters of a second TrueType font that
correspond to individual characters of the first TrueType font,
the second TrueType font being different from the first
TrueType font, individual characters of the second TrueType
font being unhinted; and
 - 15 ○ transfer hints from characters of the first TrueType font to
individual corresponding characters of the second TrueType
font.

16

17 In making out the rejection of this claim, the Office cites to the rejection
18 that it made of claim 1. For all of the reasons set forth above with respect to why
19 claim 1 is allowable over Hellmann, this claim is allowable over Hellmann.

20

21 **Claims 40-42** depend from claim 39 and are allowable as depending from
22 an allowable base claim. These claims are also allowable for their own recited
23

1 features which, in combination with those recited in claim 39, are neither disclosed
2 nor suggested in the references of record, either singly or in combination with one
3 another.

4

5 **Conclusion**

6 All of the claims are in condition for allowance. Accordingly, Applicant
7 respectfully requests a Notice of Allowability be issued forthwith. If the next
8 anticipated action is to be anything other than issuance of a Notice of Allowability,
9 Applicant intends to file an Appeal. Prior to doing so, however, Applicant
10 respectfully requests a telephone call from the Examiner to discuss this case.

11

12

13 Respectfully Submitted,

14

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